ABSTRACT

A flameproof thermoplastic resin composition substantially free of phenolic resin, red phosphorous and silicone resin comprises (A) about 40 - 95 parts by weight of a rubber modified styrene-containing graft copolymer resin, (B) about 5 - 60 parts by weight of polyphenylene ether resin; (C) about 5 - 30 parts by weight of aromatic phosphoric acid ester per 100 part by weight of (A) and (B) wherein the styrene-containing copolymer chains in rubber modified styrene-containing resin (A) comprise

(i) about 5-20% by weight having an acrylonitrile fractionation content of 0-9 % by weight

(ii) about 10-40% by weight having an acrylonitrile fractionation content of 9-20 % by weight and

(iii) about 40-80% by weight having an acrylonitrile fractionation content of not less than 20% by weight acrylonitrile

and the sum of (i), (ii), and (iii) is 100 % by weight of the total weight of styrene-containing copolymer chains in rubber modified styrene-containing resin (A). The use of a rubber modified styrene-containing copolymer resin having a particular nitrile content distribution with polyphenylene ether resin to form a base resin and an aromatic phosphoric acid ester flame retardant produces resin compositions with high impact strength and flame retardancy. The compositions according to the present invention are substantially free of phenolic resin, red phosphorous, silicone resin and other components that are required by the prior art compositions containing polyphenylene ether resins and ABS type graft copolymers.